

Title (en)  
Continuous casting method for steels.

Title (de)  
Verfahren zum Stranggiessen von Stählen.

Title (fr)  
Procédé pour coulée continue des aciers.

Publication  
**EP 0663250 A1 19950719 (EN)**

Application  
**EP 95300052 A 19950105**

Priority  
JP 1577294 A 19940114

Abstract (en)  
A continuous casting method which comprises casting molten steel into a cast piece with a circular cross section and applying soft reduction treatment of a reduction ratio from 1.0 to 3.0 % to the cast piece with a flat part of a roll at a position of a solid phase ratio from 0.2 to 0.8 before the molten steel in the center portion of the cast piece is solidified completely. <IMAGE>

IPC 1-7  
**B22D 11/12**

IPC 8 full level  
**B22D 11/00** (2006.01); **B22D 11/12** (2006.01); **B22D 11/128** (2006.01); **B22D 11/20** (2006.01); **B21B 1/46** (2006.01)

CPC (source: EP)  
**B22D 11/1206** (2013.01); **B21B 1/463** (2013.01)

Citation (search report)

- [X] EP 0211422 A1 19870225 - NIPPON STEEL CORP [JP]
- [A] US 4134440 A 19790116 - KAWAWA TAKAHO, et al
- [A] GB 2014071 A 19790822 - NIPPON KOKAN KK
- [A] EP 0417492 A2 19910320 - DAIDO STEEL CO LTD [JP]
- [X] PATENT ABSTRACTS OF JAPAN vol. 012, no. 201 (M - 707) 10 June 1988 (1988-06-10)
- [X] PATENT ABSTRACTS OF JAPAN vol. 010, no. 025 (M - 450) 31 January 1986 (1986-01-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 042 (M - 0925) 25 January 1990 (1990-01-25)

Cited by  
CN107206475A; CN108817338A; CN107000045A; US10543527B2

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0663250 A1 19950719**; **EP 0663250 B1 20010523**; DE 69520966 D1 20010628; DE 69520966 T2 20011115; JP 3257224 B2 20020218; JP H07204812 A 19950808

DOCDB simple family (application)  
**EP 95300052 A 19950105**; DE 69520966 T 19950105; JP 1577294 A 19940114